Opmantek

WHITE PAPER

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OPMANTEK

How To Scale Network Monitoring Effectively

At Opmantek we have seen a lot of our clients scale effectively, and it is rewarding to share in those successes. We have seen that the primary motivators for scaling are similar, improve user/customer satisfaction, reduce the bottom line, and better manage operational risk. The paths to success, however, are where there are fundamental differences.

Scaling With People

For a lot of businesses, the process of scaling involves increasing their staff, regardless of the industry, this will be a business's first thought. If you want to increase sales, you hire more salespeople, if you're going to deliver better service you hire my support staff. This makes sense, but some limitations aren't as obvious, and businesses won't be optimized if they are only focusing on solving their problem (lack of sales, etc.) with people.

Scaling with processes

To truly optimize the operations of your business, all of the processes involved with that business need to be optimized. This is where automation plays an integral part in helping your business grow and helping you have increased employee satisfaction. When you invest in automating the sides of your business that need it, the result is a better business, that will operate better and be in a more stable position that aids in scaling.

Scaling Your Network

Whether you are a service provider, carrier, data centre or a business that values IT, when you scale, your network will need to scale with you. If you doubled your clients overnight, it would create resource strain unless you were in a stable position to begin with. To get into a position to scale your network, you need to ensure you have as much information about your network to make intelligent decisions and to optimize everything. The two key points that will aid in this, is by increasing your mean time between faults and decreasing your mean time to resolution.

Increase Your Mean Time Between Faults (MTBF)

By increasing the mean time between faults, your network is operational for longer, and there are fewer times that you are in panic mode. This is business-critical because delivering SLAs is a core function of your network team, and if you increase your delivery from 97% to 99%, you will have a better network operation.

Getting to this point, you will have to start making intelligent decisions regarding how you see your network. The first step is to ensure you are getting the maximum amount of information on your network, simple up or down results are the beginning, but you need more data to get proactive. A simple step to get started is having NMIS running as your network management system, as soon as you give it credentials it will start monitoring your devices for:

- Reachability – Node availability or pingability
- Availability – Interface availability
- Response time
- CPU Utilization
- Memory Utilization
- Interface Utilization
- Disk Utilization
- Swap Utilization

Using these metrics, as the base, you will be able to get ahead of the faults in your network and significantly reduce the amount of downtime that your network will occur. Instead of getting a node down alert, you may receive a CPU Utilization 90% alert and can take actions to prevent that node from failing.

NMIS will provide a solid foundation that you can build on, but it wouldn't be an Opmantek solution if we didn't involve automation into this. Using opEvents with NMIS will help automate a significant portion of your event management.

A key feature of opEvents comes with the summary reports, using these reports you can identify trends in the network and proactively fix issues before they cause outages.

Reduce your Mean Time To Resolution (MTTR)

By decreasing the mean time to resolution, your network will have shorter periods of outages because you have more information available to identify the causes. The easiest way to achieve this is to get information into your engineer's hands so they can identify the cause and resolve it.

By using the data collected by NMIS, you will have the full history of metrics for all of your devices, that will aid in working out what caused the fault. To further enhance the quality of the information, your engineers will be using you can add opConfig to capture all configuration changes on your devices, you will know what has changed, who changed it and when it was changed.

Further to this, opConfig's virtual operator feature can be used to help create jobs, comprised of commands sets, to be run on nodes/groups/locations. Engineers can use these command sets to help troubleshoot nodes on-demand with a single click.

Learn More

If you would like to learn more about 'How to scale network monitoring effectively' and the sorts of processes that can be automated within a modern enterprise IT team, contact our engineering team for a free network assessment.

For more information visit us at:

www.opmantek.com

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